

Title (en)
LITHIUM CONTAINING TRANSITION METAL SULFIDE COMPOUNDS

Title (de)
LITHIUMHALTIGE ÜBERGANGSMETALLSULFIDVERBINDUNGEN

Title (fr)
COMPOSÉS DE SULFURE DE MÉTAL DE TRANSITION LITHIÉ

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Abstract (en)
[origin: GB2464455A] A process for making lithium-containing transition metal sulfides is disclosed which involves heating at least one transition metal sulfide with a lithium-containing compound, wherein the lithium-containing compound is selected from one or more of lithium oxide, lithium sulfate, lithium carbonate, anhydrous lithium hydroxide, lithium hydroxide monohydrate, lithium oxalate, lithium nitrate. The transition metal may be one or more of iron, manganese, cobalt, nickel, copper and zinc. The heating may be carried out in a non-oxidising atmosphere or under reducing conditions. The reducing conditions may be generated by the presence of a reducing gas such as carbon monoxide, hydrogen, hydrogen sulfide, methane or other alkane gases, or a reducing agent such as carbon or carbonaceous materials that form carbon on being heated. The sulfide compounds formed may be used to form electrodes for low voltage rechargeable batteries. Also disclosed is a method of forming lithium sulfide.

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